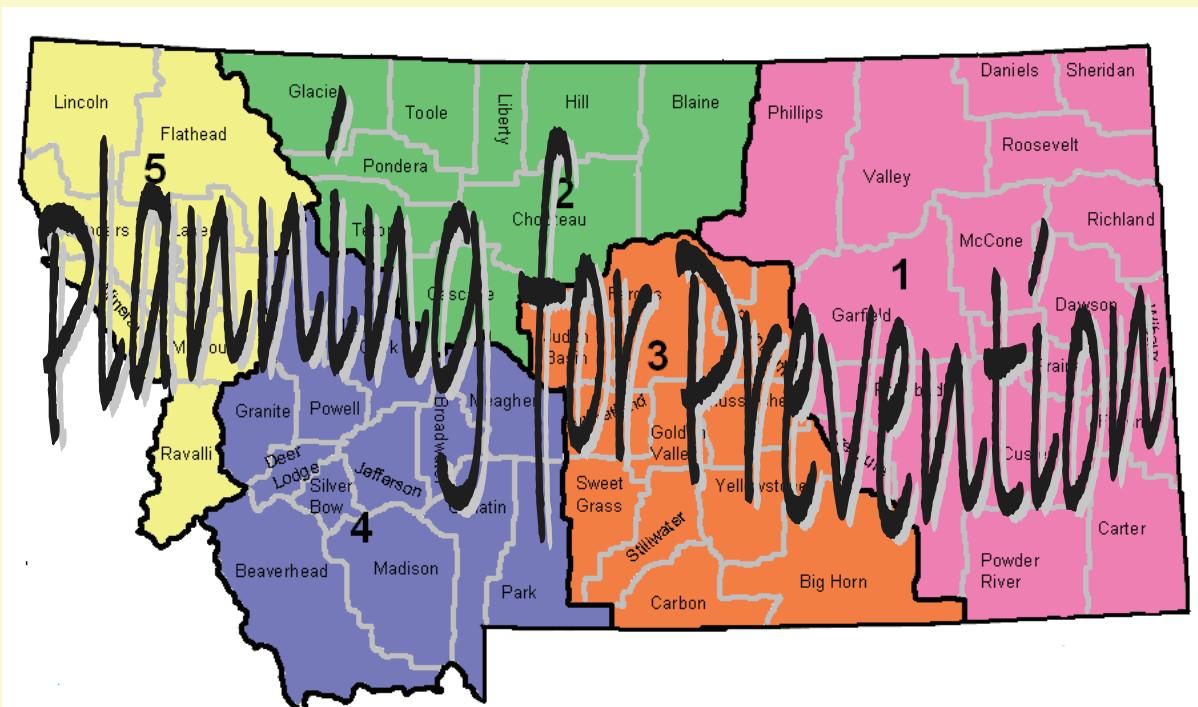


MONTANA

EPIDEMIOLOGICAL PROFILE:



STDs AND HIV/AIDS

JUNE 2008

**Montana Department of Public Health and Human Services
Communicable Disease Control and Prevention Bureau**

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Executive Summary

- ◆ As of June 30, 2008, a total of 870 cases of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have been reported to Montana Department of Public Health and Human Services (MTDPHHS) since reporting began in 1985 and 504 are reported as not being deceased and not known to have moved from Montana.
- ◆ Though Montana is considered a “low incidence” state with respect to HIV/AIDS, 15-25 new cases were diagnosed every year from 2000-2007.
- ◆ Nearly 9 of every 10 reported cases on HIV/AIDS have been men.
- ◆ Men who have sex with men (MSM) account for 4 times as many reported cases of HIV/AIDS as do persons of other known risk factors.
- ◆ The largest risk factor for females is high risk heterosexual contact (HRH).
- ◆ Nearly 90% of HIV/AIDS cases occur in persons reporting race as White, a percentage equal to the general Montana population. The same proportionate representation is seen with the largest minority group, American Indians, who represent about 6.3% of the general population and about 7% of the reported HIV/AIDS cases.
- ◆ Since 2000, more diagnosed cases have been in the 35-39 year old age group than in other age groups.
- ◆ 69% of known persons living with HIV/AIDS have sought care in the last 18 months.
- ◆ STD cases were reported from nearly every county in 2007. *Chlamydia trachomatis* infections (chlamydia) has remained the most common reported STD since 2003, followed by infection with *Neisseria gonorrhoeae* (gonorrhea).
- ◆ Most chlamydia and gonorrhea infections were reported in persons of White race, though the case rate was 7.5 times higher in American Indians/Alaska Natives than Whites in 2006.
- ◆ Twenty syphilis cases (*Treponema pallidum*) were reported from 2003-2007 and all were among those of unknown or White race. The majority were men. Five were known to be co-infected with HIV.
- ◆ Due to the economic disparities and rural locations in Montana, some populations may have less access to testing, care, and treatment; these populations may not be fully reflected in this report due to underreporting. Further prevention/outreach work must be done in order to maintain or reduce the number of HIV/AIDS and STD cases among Montana’s population.

Introduction

The following report provides information derived from data collected in Montana about HIV/AIDS and selected STDs. It is meant to provide an overview of the characteristics of each disease including demographic groups affected, number of occurrences, and any disparities. The information from this report is intended to help plan prevention and control programs.

The profile is presented in several parts, which become increasingly focused. The first section describes the characteristics of the state in general, including demographics and socio-economic status. This section is followed by general cumulative information on all cases of HIV/AIDS reported in Montana, which is then broken down by past (1985-1999) and recent (2000-2007) cases. Prevalent, or living, cases are then discussed separately by sex and then newly diagnosed AIDS cases and their characteristics are presented. Finally, the access to care section describes data collected on HIV testing and medical treatment for persons living with HIV/AIDS. The section on STDs includes information on *Chlamydia trachomatis* (chlamydia), *Neisseria gonorrhoea* (gonorrhea) and *Treponema pallidum* (syphilis) by demographics and geography. All acronyms are listed in the glossary at the end of this document.

AIDS reporting began in 1985 followed by HIV reporting in 2000. Reports are collected through passive and active surveillance. All new HIV/AIDS cases are reportable in Montana as well as persons living with HIV/AIDS who have moved to the state, but were diagnosed elsewhere. The system uses a standard case report form to collect demographic, risk, treatment, vital status, and laboratory information. All information is highly confidential and only general demographic data are transmitted to the national database with no names or addresses reported. This information is then used to guide prevention efforts based on current risk behaviors and affected populations.

STD information is collected through a similar surveillance system using a case report form and database to track trends in STD cases. Because STDs are typically recognized relatively soon after exposure to infection, they can often be used as marker for unsafe sexual practices. These numbers may be biased towards women, as more women receive screening opportunities when seeking family planning services. They may also only be representative of the population of women who seek care.

There are several other limitations to consider when interpreting this profile. Because these data rely on reporting, numbers provide minimum estimates. For example, people receiving anonymous HIV testing will not be included in surveillance numbers. Furthermore, completeness of reporting can affect interpretation. For counties with complete reporting, the number or rate of cases may look much higher than in another area with incomplete reporting, though the true rate of infections may not differ. Another consideration when looking at these data is the sample size. When the data set is stratified, numbers may become very small. The addition of one additional case, may lead to a large percentage difference between some strata.

These databases are maintained daily and are constantly changing and being updated with vital information, laboratory data, and residence information. The data shown in this report represent the status of the HIV/AIDS database as of June 30, 2008 and STD cases diagnosed from 2003-2007 as well as HIV/AIDS and STD cases *reported* through June 30, 2008.

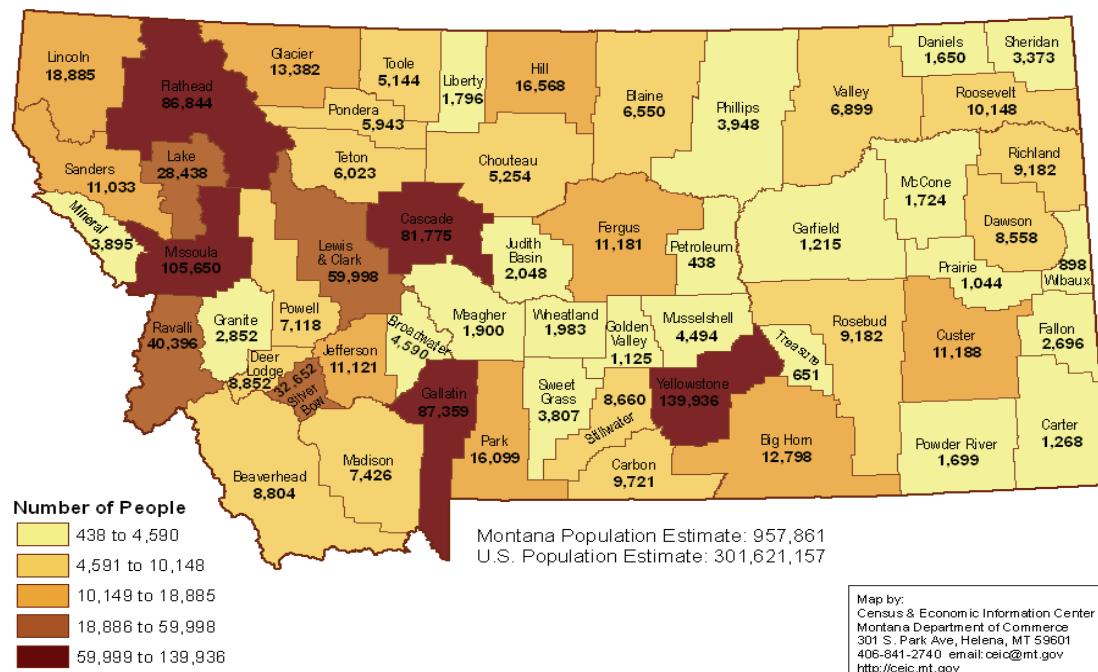
This profile was prepared by the MTDPHHS HIV/AIDS Surveillance program in collaboration with the STD Program and Ryan White CARE and Prevention Program. Any questions or comments can be directed to the HIV/AIDS Surveillance Program at (406) 444-3049.

Sociodemographic Characteristics of Montana's Population

General Demographics

In 2007, the estimated population of Montana was approximately 957,861¹ (Figure 1). Population in the 56 counties ranges from 438 in sparsely populated Petroleum County to nearly 140,000 in Yellowstone County. By density, 45 counties are classified as frontier, or having 6 or fewer people per square mile, and 10 counties having 6-50 people per square mile, classifying them as rural². There are 3 metropolitan statistical areas in the state, Billings, Great falls, and Missoula.

Figure 1. County Populations, 2007



Demographic Composition

The Census Bureau's American Community Survey produces estimated numbers for selected characteristics of populations. In 2006, the largest age group in the Montana population was 45-64 year olds (Table 1), while the sex of the population was evenly distributed between males and females (Table 2).

Table 1. Age of the General Population, 2006

Age in Years	Percent
Under 5	5.9
5-14	12.5
25-44	24.6
45-64	28.3
Over 65	13.9

Table 2. Sex of the General Population, 2006

Sex	Percent
Male	49.9
Female	50.1

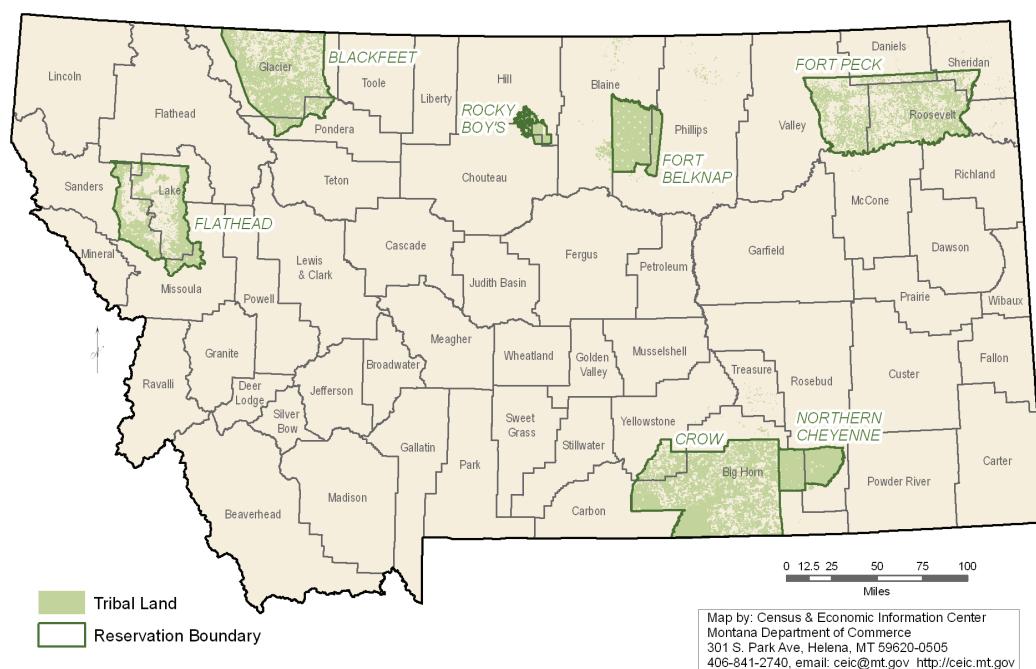
Sociodemographic Characteristics of Montana's Population

Most Montanans report being either White, non-Hispanic (90%) or American Indian/Alaska Native (6.3%). There are few other races in Montana compared to the United States (Table 3). The state of Montana contains seven American Indian reservations throughout the state (Figure 2).

Table 3. Race/Ethnicity of Montana versus the United States, 2006

Race/Ethnicity	Montana (%)	US (%)
White, not Hispanic	89.7	73.9
American Indian/Alaska Native	6.3	0.8
Black or African American	0.5	12.4
Asian	0.6	4.4
Native Hawaiian and Other Pacific Islander	0.1	0.1
Some other race	0.9	6.3
Two or more races	2.0	2.0
Hispanic or Latino, any race	2.2	14.8

Figure 2. Location of Montana's Tribal Lands



Income

Figure 3 shows the percentage of persons living in poverty by county, with an average statewide of 14.6% (Census, 2000). Figure 4 illustrates the median household income for Montanans by county, with a statewide median of \$33,024.

Figure 3. Percentage of Persons Living in Poverty, by County, 2000

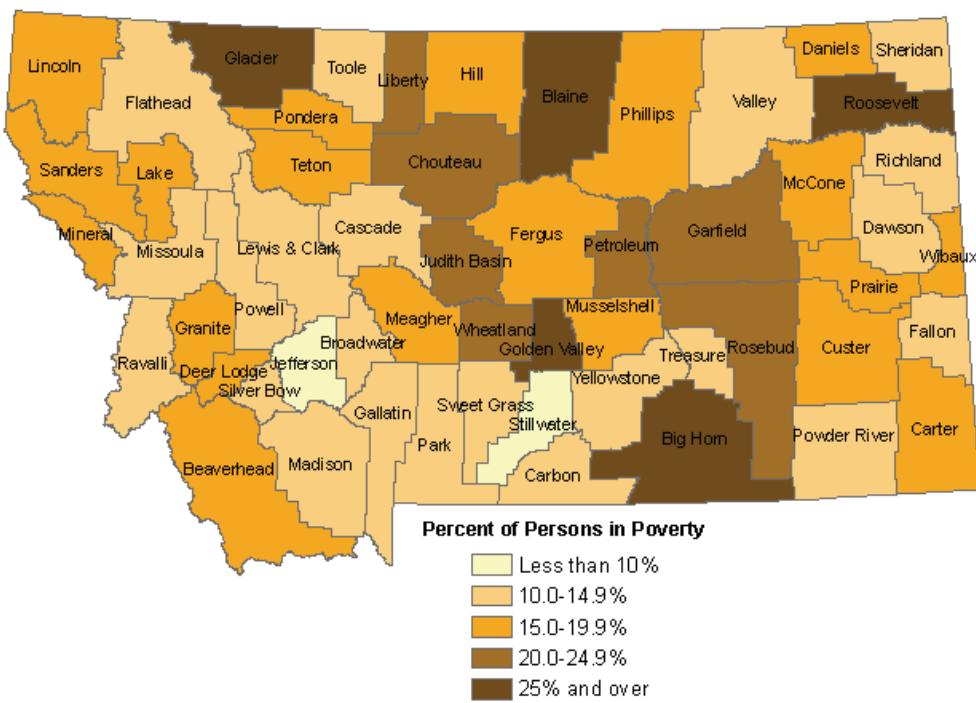
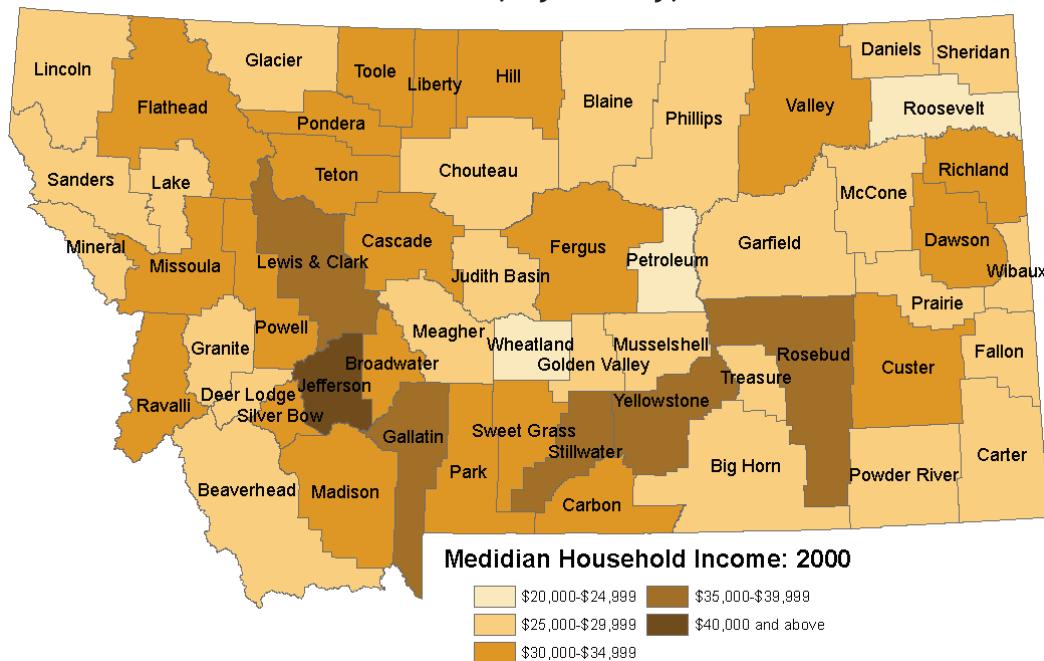


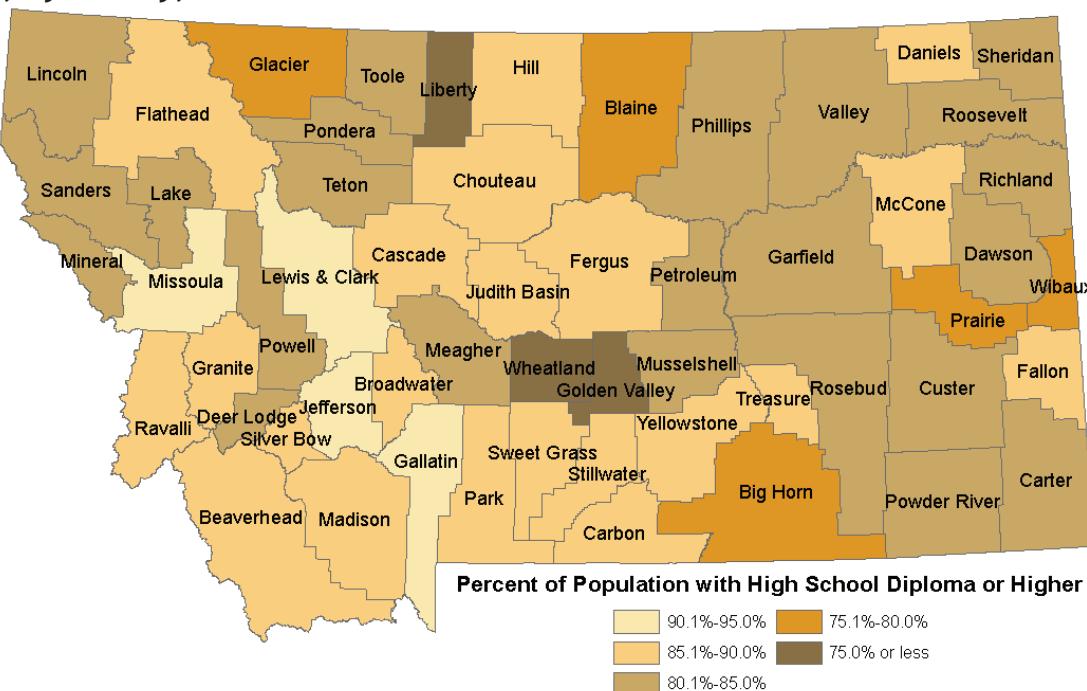
Figure 4. Median Household Income, by County, 2000



Education

87.2% of Montana residents, 25 years of age or older, reported having received a high school diploma or higher; 24.2% had earned a bachelor's degree or higher educational degree. County specific proportion of persons aged 25 years or older with high school diploma is displayed in Figure 5. Eight percent of persons aged 16-19 reported not being enrolled in school and not being a high school graduate.

Figure 5. Percentage of Persons 25 or Older with a High School Diploma or Higher, by County, 2000



Insurance

Kaiser Family Foundation reports show that for 2005-2006, Montana had similar insurance coverage rates as the rest of the nation, however more Montanans tend to have individual insurance and fewer people have employer provided insurance than the rest of the population in the US (Table 4).

Table 4. Health Insurance Coverage of Adults 19-64, Montana versus the United States, 2005-2006

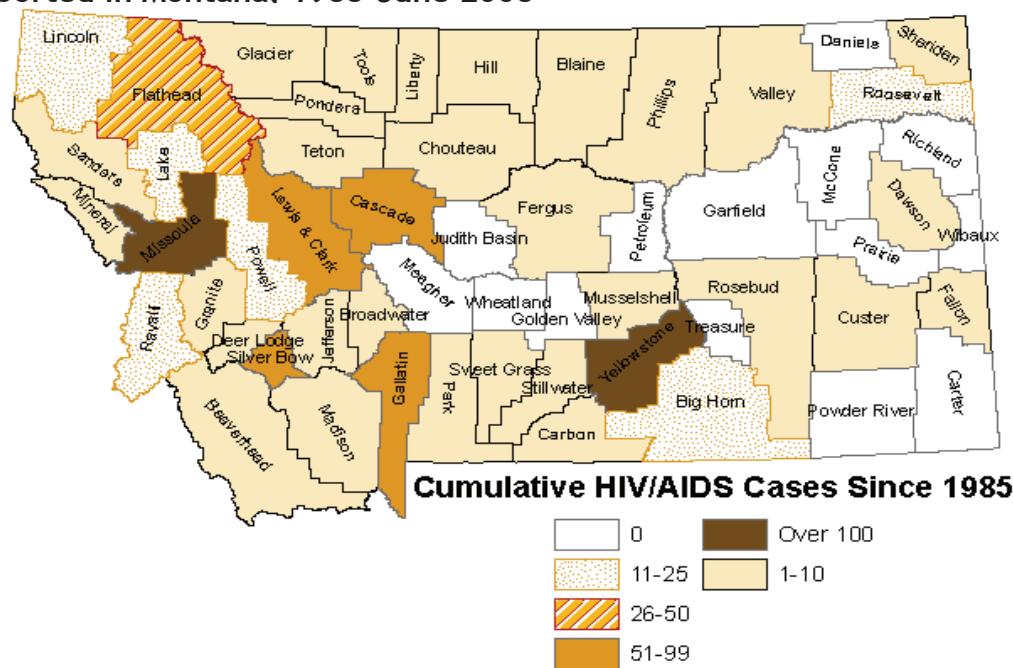
	MT (%)	US (%)
Employer	57	63
Individual	10	6
Medicaid	7	8
Other Public	5	3
Uninsured	21	20

Cumulative HIV/AIDS Data 1985-June 2008

Cumulative HIV/AIDS Data

As of June 30, 2008, a total of 870 HIV/AIDS cases have been reported in Montana. This number includes HIV/AIDS cases newly diagnosed in Montana and cases diagnosed out of state, but have since moved to Montana. At the time of report, 72% of those cases were living in the seven most populated counties (Yellowstone, Missoula, Flathead, Cascade, Lewis & Clark, and Ravalli) (Figure 6).

Figure 6. County of Residence at Time of Report of All HIV/AIDS Cases Ever Reported in Montana. 1985-June 2008



Over time, the annual number of deaths among people with HIV/AIDS has slowed, while the number of reported cases continues to increase (Figure 7).

Figure 7. Cumulative Frequency of Reported HIV/AIDS Cases and Deaths, by Year of Diagnosis or Death, 1985-June 2008

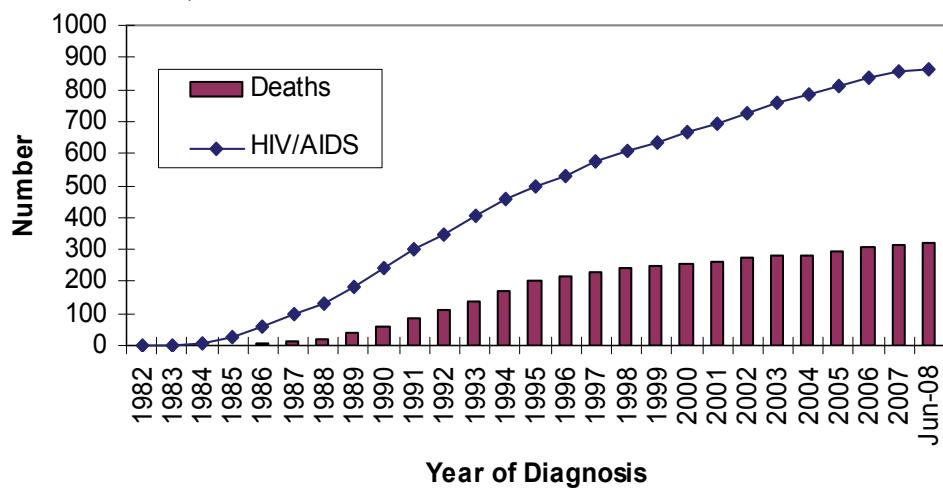


Table 5. Cumulative Reported HIV/AIDS Cases by Selected Characteristics

<i>Characteristic</i>	<i>Cumulative Cases</i>
Sex	Number (%)
Male	756 (87)
Female	114 (13)
Age	
Under 5	6 (<1)
5-14	0 (0)
15-24	118 (14)
25-44	612 (70)
45-64	123 (14)
Over 64	11 (1)
Race	
White	756 (87)
American Indian/Alaska Native	57 (7)
African American/Black	29 (3)
Hispanic, Any Race	24 (3)
Unknown	4 (<1)
Mode of Exposure*	
Men Having Sex with Men (MSM)	462 (53)
Injecting Drug Use (IDU)	111 (13)
MSM & IDU	93 (11)
High Risk Heterosexual	91 (10)
Transfusion/Hemophilia	25 (3)
Mother with HIV/AIDS	6 (<1)
Other/Risk not Specified	82 (9)
Total	870

*Mode of Exposure defined on page 28

Trends in Recent versus Past HIV/AIDS Cases

Since HIV/AIDS was first identified in 1981, the demographics of the persons affected by this disease have changed. The following figures illustrate changes in demographics among newly diagnosed HIV/AIDS cases in Montana since 1985.

Figure 8. Average Age at Diagnosis of Reported HIV/AIDS Cases, 1985-June 2008

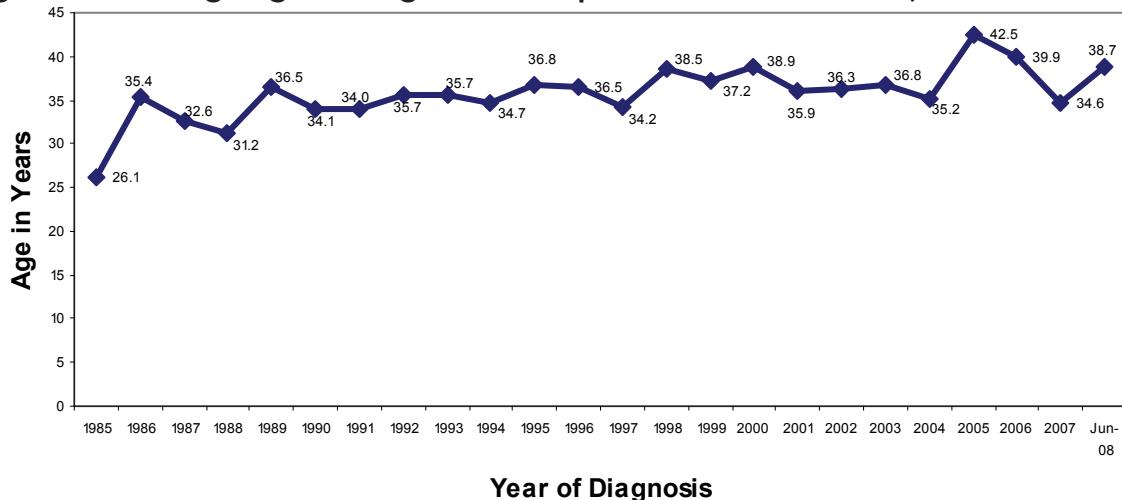
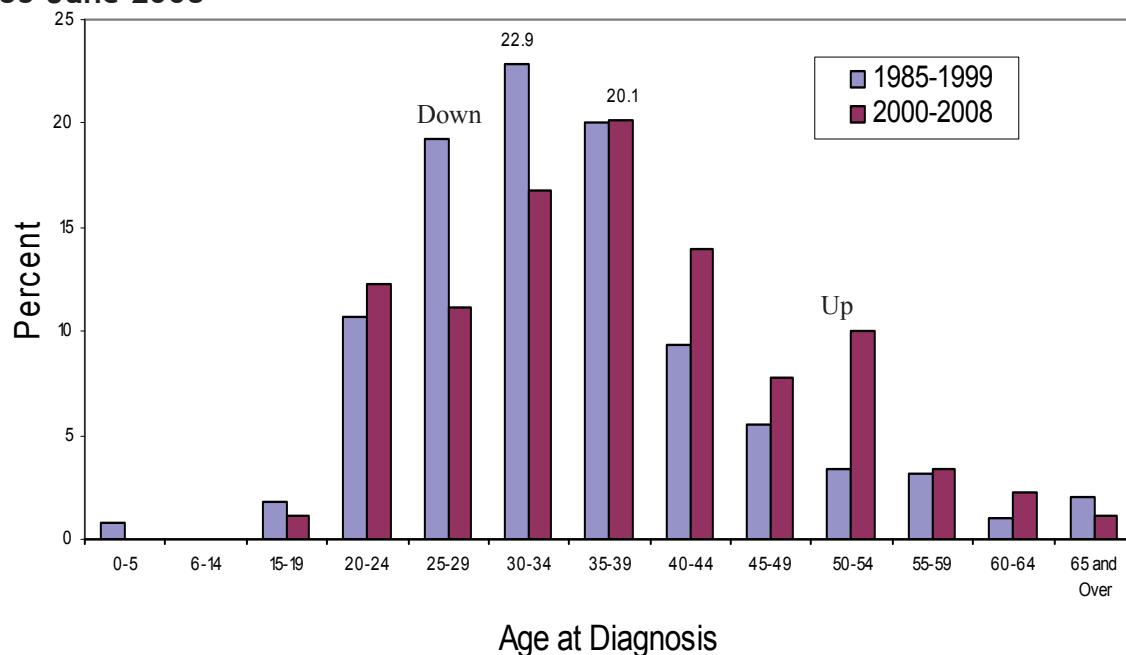


Figure 8 shows a modest increase in the average age of newly diagnosed HIV/AIDS cases in Montana. For the periods of 1985-1999 and 2000-2008, the average age has increased from 35 to 37.5 years old. This is further demonstrated in Figure 9, which shows a shift in age where the largest percentage of cases were diagnosed from 1985-1999 was among 30-34 year olds while in 2000-2008 the mode age group was 35-39. Statistically significant changes are noted above each category (z test, P<0.05).

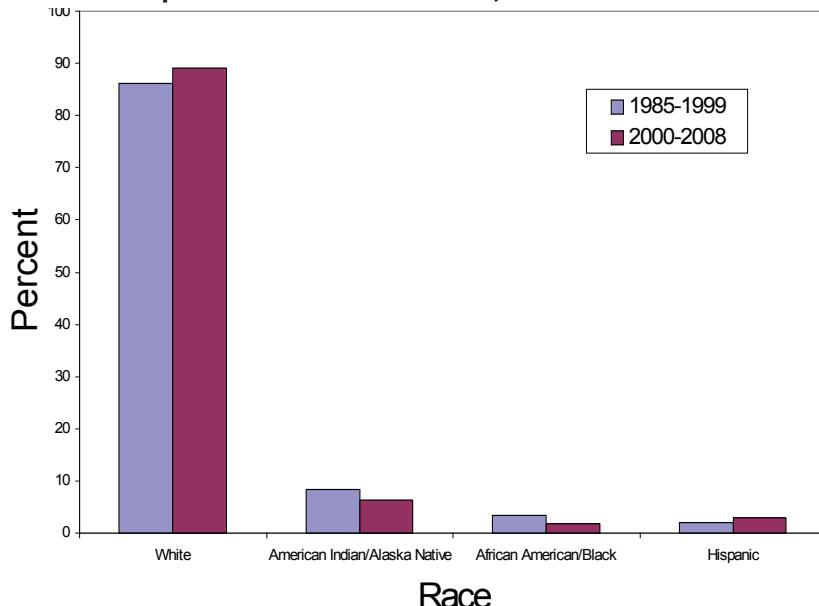
Figure 9. Age at Diagnosis in Two Time Periods of Reported HIV/AIDS Cases, 1985-June 2008



Trends in Recent versus Past HIV/AIDS Cases

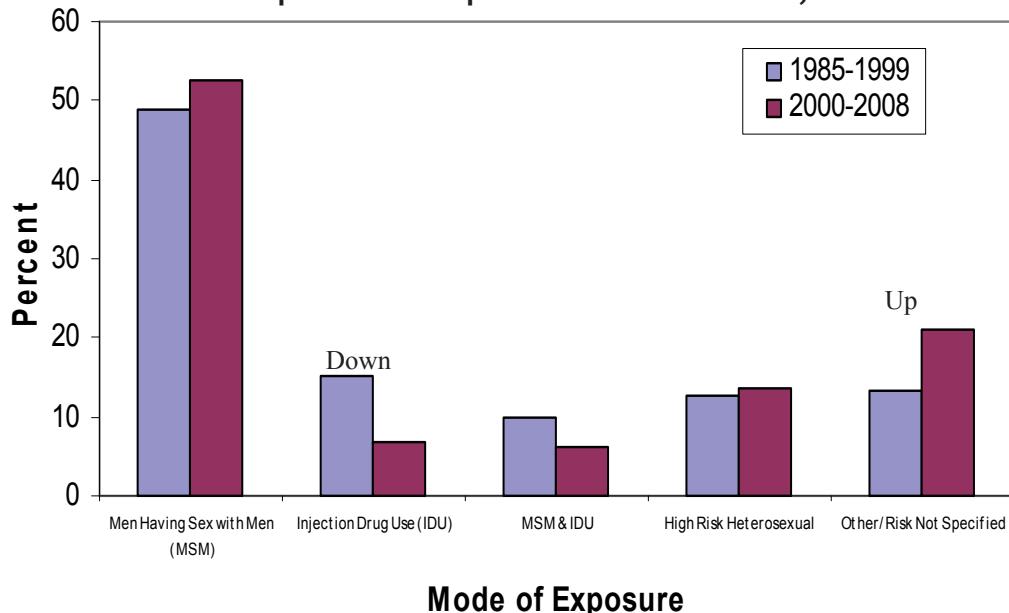
When comparing cases reported in 2000-2008 to those reported from 1985-1999, there has been a slight increase in cases among the White population and a slight decrease among the American Indian/Alaska Native population (Figure 10). No statistically significant race changes have occurred during these time periods (z test, $P < 0.05$).

Figure 10. Race of Reported HIV/AIDS Cases, 1985-June 2008



The percentage of newly diagnosed cases with mode of exposure reported as MSM and heterosexuals has increased slightly, while the risk from IDU seems to have decreased. The percent of cases with no risk reported also continues to grow and does not reflect an increase in other modes of exposure (transfusion, hemophilia, transplants) (Figure 11). Statistically significant changes over time are noted above each category (z test, $P < 0.05$).

Figure 11. Mode of Exposure of Reported HIV/AIDS Cases, 1985-June 2008

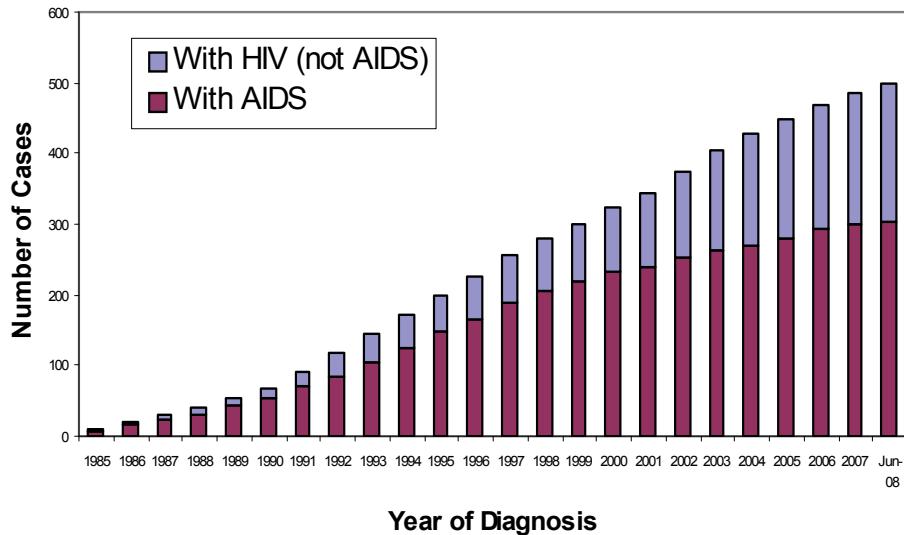


Prevalent HIV/AIDS Cases

Reported Living HIV/AIDS Cases in Montana

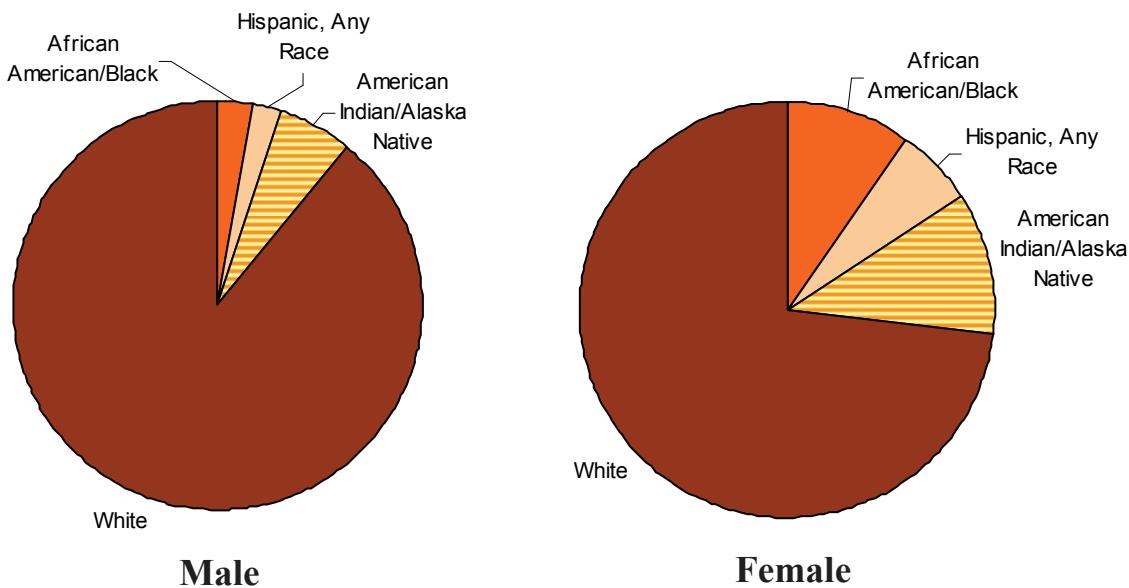
The following figures demonstrate characteristics of reported HIV/AIDS cases known to be currently living in Montana, including those diagnosed out of state. As of June 30, 2008 there were 504 known HIV/AIDS cases living in Montana. Because prevalent numbers are based on reported cases, this number may underestimate the number of prevalent cases living in Montana.

Figure 12. Reported Living HIV/AIDS Cases, by Diagnostic Status and Year of Diagnosis



The number of people known to be living with HIV/AIDS in Montana has steadily increased since 1985. As of June of 2008, 60% of total living HIV/AIDS cases had been reported as AIDS Cases (Figure 12). Minority races constitute a larger proportion of female than of male cases. (Figure 13).

Figure 13. Reported Living HIV/AIDS Cases, by Sex and Race



The majority of prevalent male cases are White men who have sex with men (MSM). MSM is also the most common mode of exposure for American Indians/Alaska Natives (AI/AN) (Table 6). The majority of prevalent female cases are among Whites who have had high risk heterosexual sex (HRH). HRH is also the most common mode of exposure for American Indians/ Alaska Native females (Table 6). At the time of diagnosis, MSM appears to be the most common risk group for all adult ages, except those over age 64, with most cases occurring between the ages of 25-44 (Table 7). At the time of diagnosis, females of ages 25-44 were most common with HRH being the most common risk group for all adult age groups (Table 7).

Table 6. Reported Living HIV/AIDS Cases, by Sex, Race and Mode of Exposure

	Males			Females		
	White (%)	AI/AN (%)	Other (%)	White (%)	AI/AN (%)	Other (%)
MSM	247 (66.4)	10 (41.7)	11 (42.3)	N/A	N/A	N/A
IDU	34 (9.1)	5 (20.8)	<5 (-)	12 (20.0)	<5 (-)	5 (38.5)
MSM & IDU	47 (12.6)	5 (20.8)	<5 (-)	N/A	N/A	N/A
High Risk<5 (-) Heterosexual	15 (4.0)	<5 (-)	<5 (-)	35 (58.3)	5 (55.6)	6 (46.2)
Risk Not Specified/Other	29 (7.8)	<5 (-)	9 (34.6)	13 (21.7)	<5 (-)	<5 (-)
Total	372	20-28	20-32	68	5-13	11-16

Table 7. Reported Living HIV/AIDS Cases, by Sex, Age at Diagnosis and Mode of Exposure

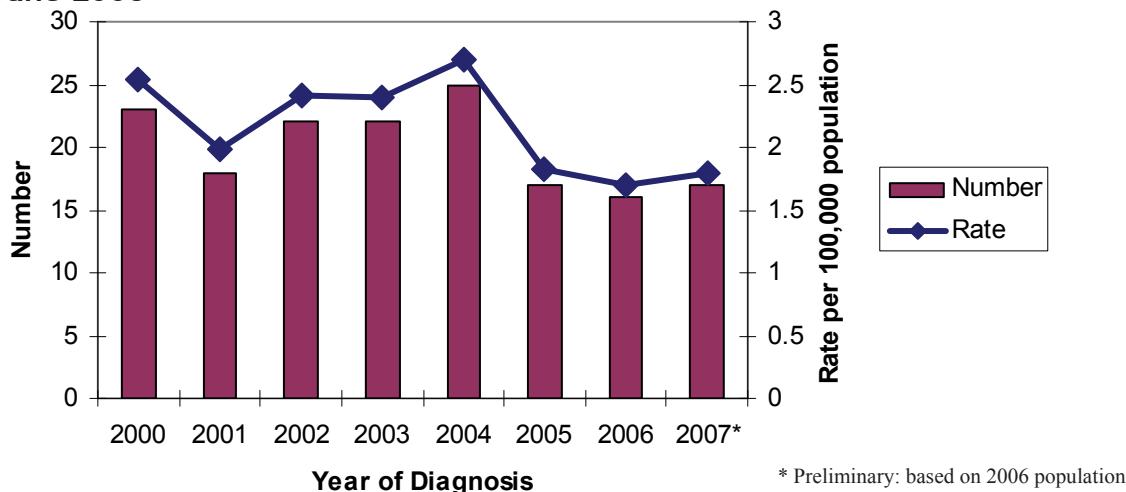
	Males					Females				
	0-5 (%)	15-24 (%)	25-44 (%)	45-64 (%)	Over 64 (%)	0-5 (%)	15-24 (%)	25-44 (%)	45-64 (%)	Over 64 (%)
MSM	N/A	41 (61.2)	190 (63.3)	37 (71.1)	<5 (-)	N/A	N/A	N/A	N/A	N/A
IDU	N/A	5 (7.5)	33 (11.0)	<5 (-)	<5 (-)	N/A	<5 (-)	14 (27.5)	<5 (-)	<5 (-)
MSM & IDU	N/A	15 (22.4)	38 (12.7)	<5 (-)	<5 (-)	N/A	N/A	N/A	N/A	N/A
High Risk Heterosexual	N/A	<5 (-)	30 (10.0)	5 (9.6)	<5 (-)	N/A	12 (70.6)	29 (56.9)	<5 (-)	<5 (-)
Risk Not Specified/ Other	<5 (-)	<5 (-)	9 (3.0)	5 (9.6)	<5 (-)	<5 (-)	<5 (-)	8 (15.7)	5 (41.7)	<5 (-)
Total	0-5	61-69	300	47-55	0-20	0-4	12-20	51	5-13	0-12

Newly Diagnosed HIV/AIDS Cases in Montana

Newly Diagnosed HIV/AIDS Cases

From 2000-2007, 16-25 HIV/AIDS cases were reported each year (Figure 14). As of June 30, 2008, 12 cases have been reported. The HIV/AIDS case rate has decreased slightly since 2000. Nationally, the estimated rate of HIV/AIDS cases in 2006 was 18.5 per 100,000 population while the rate in Montana was 1.7 cases per 100,000 population.

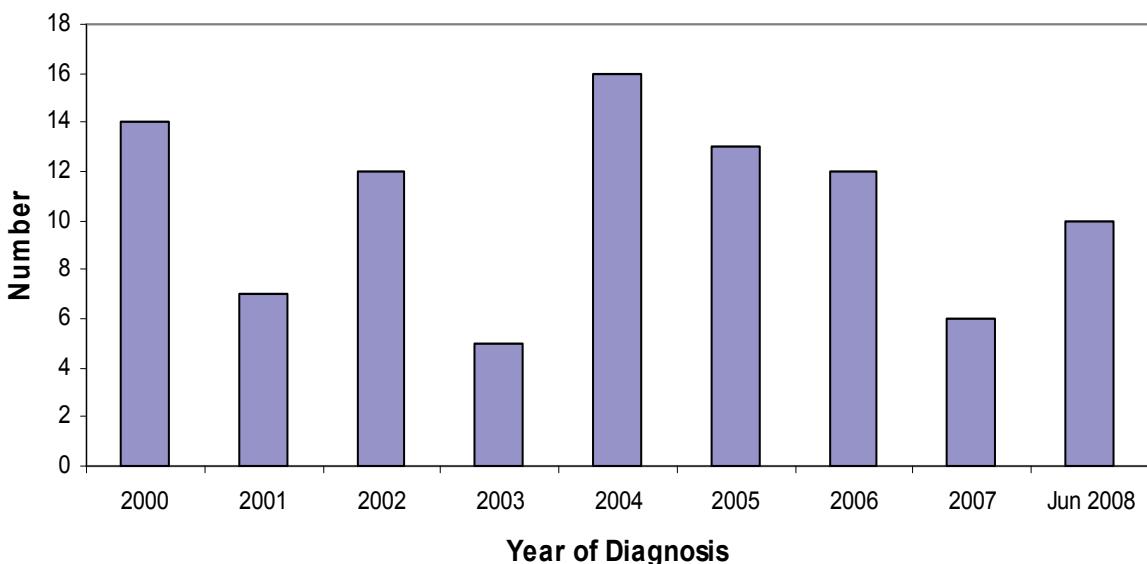
Figure 14. Newly Diagnosed HIV/AIDS Cases in Montana, by Diagnostic Status, 2000-June 2008



* Preliminary: based on 2006 population

The number of AIDS diagnoses (at first report of HIV or progression from HIV) has ranged from 5-16 since 2000 (Figure 15). The percentage of HIV/AIDS cases with AIDS at the time of diagnosis has ranged from a low of 9% in 2003 to a high of 38% in 2006 (not shown). An AIDS diagnosis can be made if a person has one of 26 AIDS defining opportunistic infections or a CD4 count of less than 200 or under 14%.

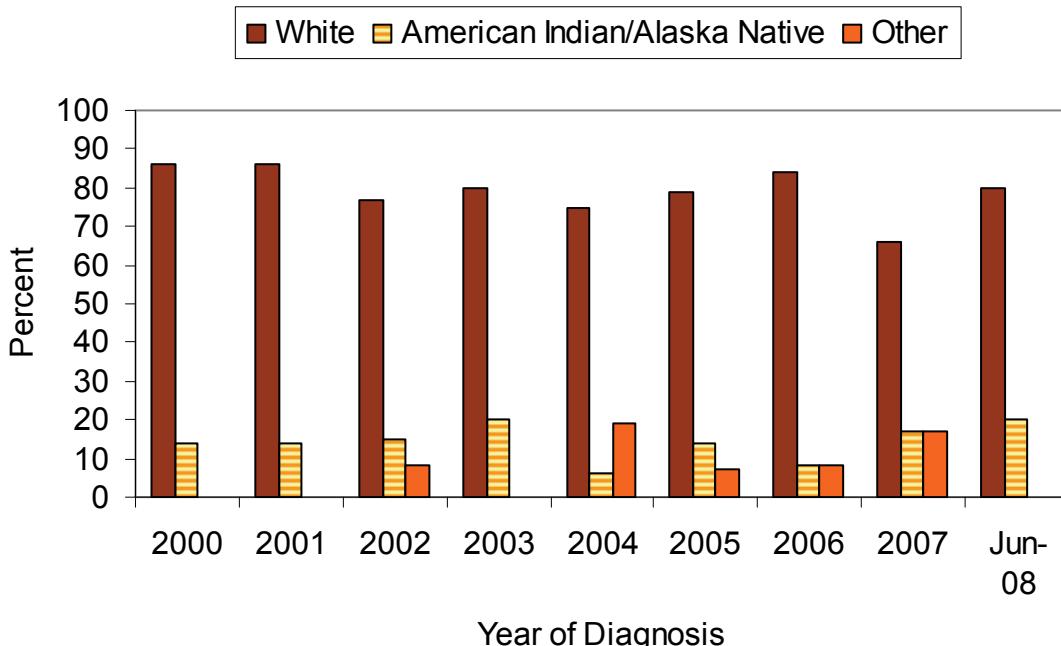
Figure 15. Number of Newly Reported AIDS Diagnoses in Montana, 2000-June 2008



Newly Diagnosed HIV/AIDS Cases in Montana

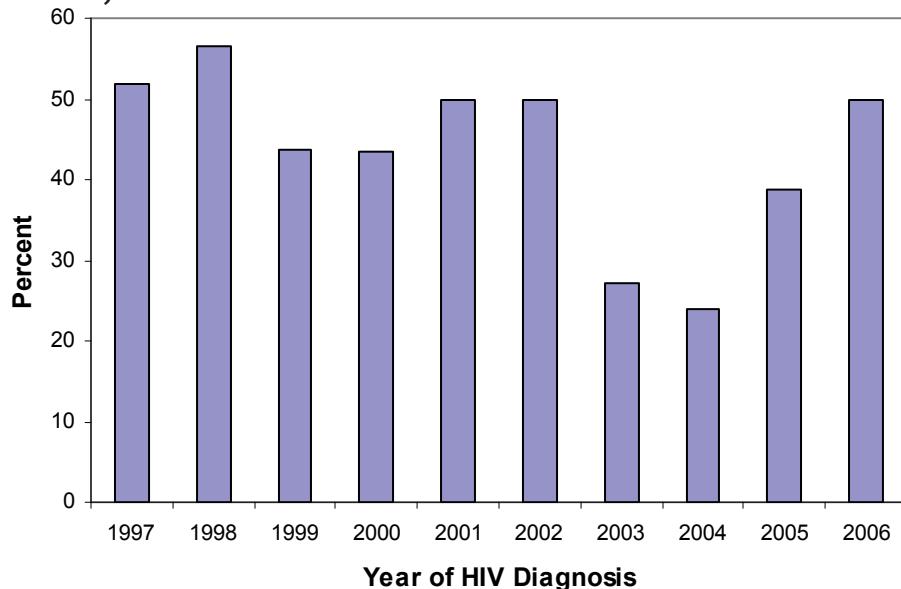
The majority of new AIDS cases (at HIV diagnosis or progression from HIV) are among those who reported White race. American Indians have regularly represented 10-20% of new AIDS cases (Figure 16).

Figure 16. Number of New AIDS Diagnoses in Montana, by Race, 2000-June 2008



The time to AIDS diagnosis is calculated as a sign of late testing and access to care. In the last 10 years, from 24% to 56% of new HIV cases progressed to AIDS in less than 1 year (Figure 17). In 2006, 38% of the reported AIDS cases in the United States occurred less than 12 months after an initial HIV diagnosis.

Figure 17. Percentage of Newly Diagnosed HIV Cases That Progressed to AIDS in Less than 1 Year, 1997-2006



Access to Care for Living HIV/AIDS Cases

Access to Care

Based on data from the 2006 Behavior Risk Factor Surveillance System (BRFSS), the percentage of people, aged 18-64, who had ever been tested for HIV/AIDS was estimated by health planning region (Figure 18). However, overall the state percentage is about 10% lower than the national estimate of persons who reported having ever been tested². Most testing occurred in a private doctor's office (29%) or a clinic (30%) (Figure 19).

Figure 18. Percentage of the Population Reporting Having Ever Been Tested for HIV/AIDS[§], by Health Planning Region, BRFSS, 2006

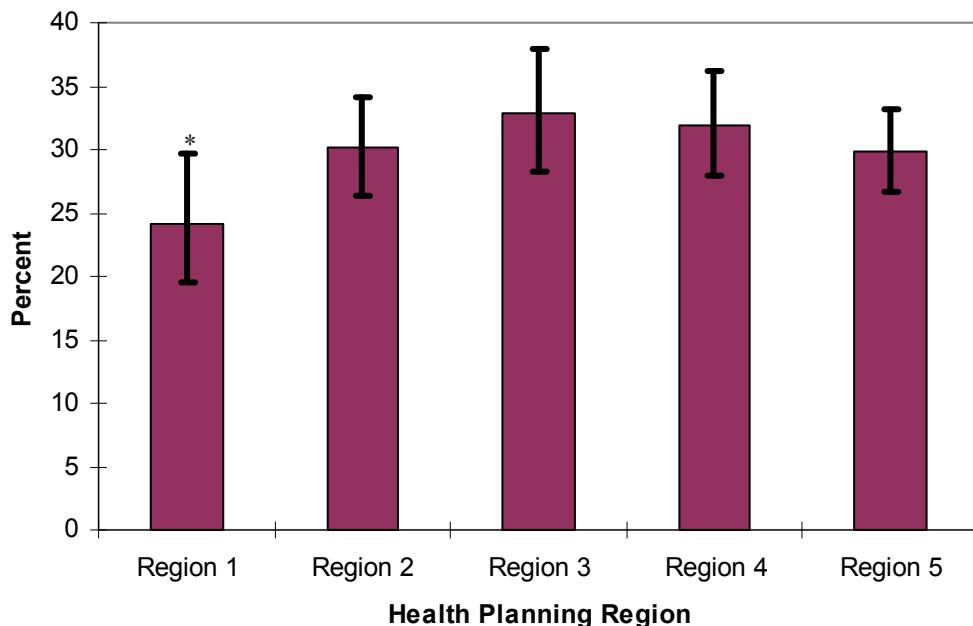
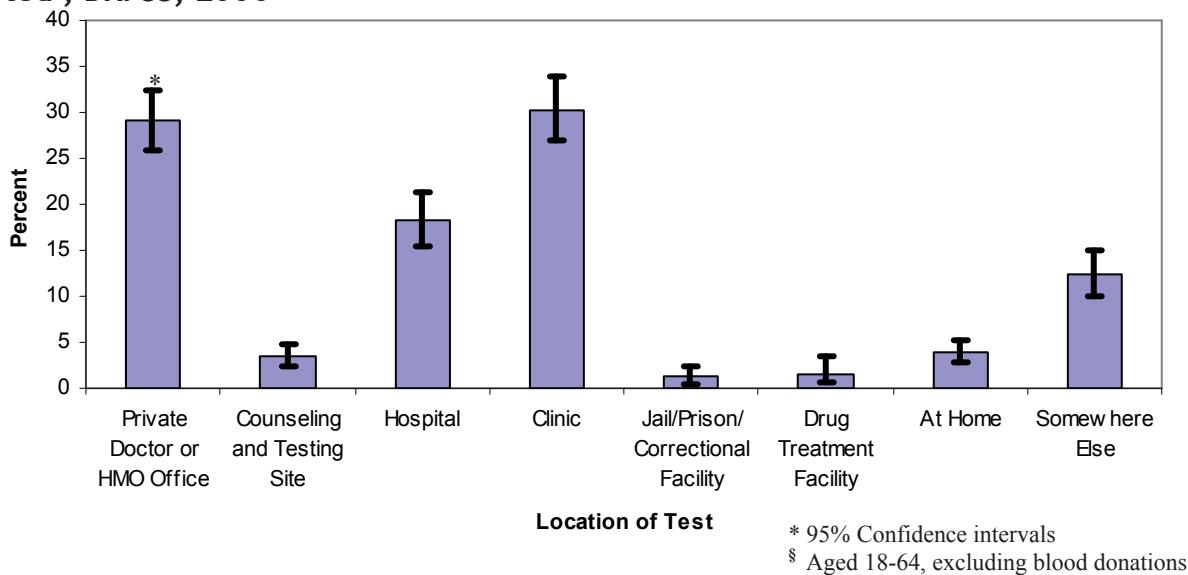


Figure 19. Location of HIV/AIDS Testing of Those Who Report Having Ever Been Tested[§], BRFSS, 2006



Access to Care for Prevention and Treatment

Ryan White CARE Act

The Ryan White CARE Act was enacted as a federal program in August 1990 and funds services to over 500,000 people with HIV/AIDS every year³. The program is named after Ryan White, a teenager who died after acquiring HIV from blood products used to treat his hemophilia. His fight to stay in school and live a “normal life” made him a public advocate for persons living with HIV/AIDS. Montana receives Ryan White CARE Act funds to support drug assistance, public clinics, and program planning and evaluation. Two areas, Missoula and Billings, receive separate funds to support community based health care providers. There are seven Ryan White supported clinics in Montana.

- Of the 504 known living HIV/AIDS cases, 60%, have accessed the Ryan White program
- 69% of known living cases have accessed medical care (public and private) in the last 18 months (Table 7)
- 93 people receive drug assistance through the AIDS Drug Assistance Program (ADAP)

Table 7. Characteristics of Persons Living with HIV/AIDS Who Accessed Medical Care in the Last 18 Months

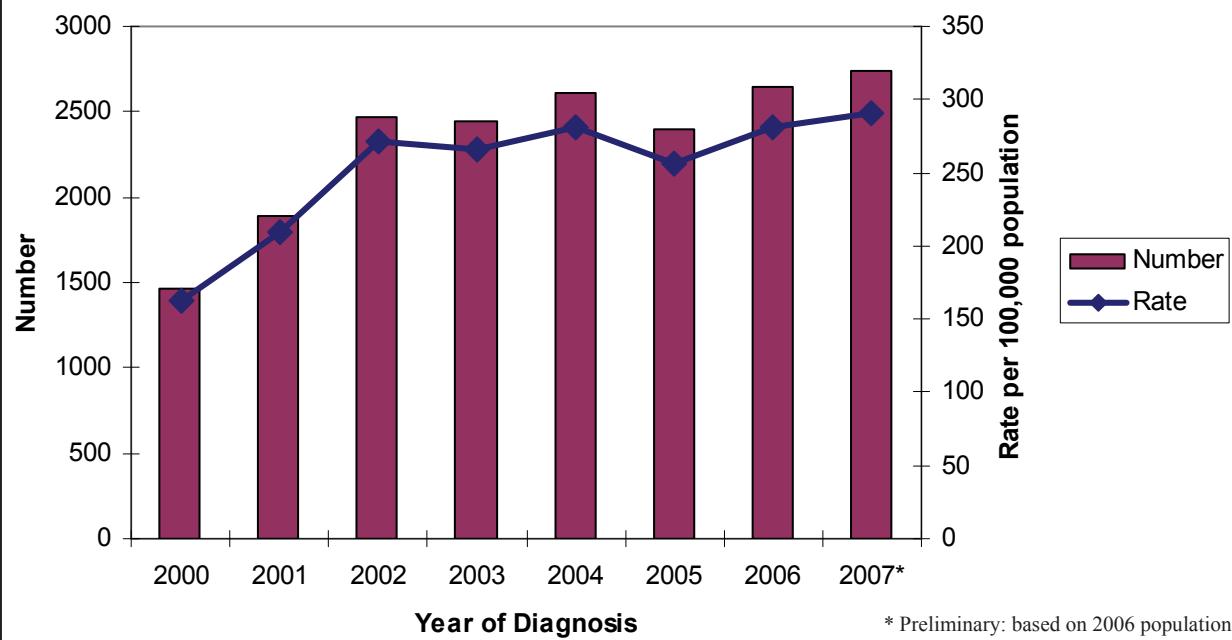
	<i>Percent in Care</i>	<i>Percent Not in Care</i>
Diagnostic Status		
HIV	74.2	25.8
AIDS	65.2	34.8
Sex		
Male	68.0	32.0
Female	73.5	26.5
Race		
White	68.7	31.3
American Indian/Alaska Native	72.7	27.3
African American/Black	60.0	40.0
Hispanic	71.4	28.6
Age		
Under 15	100	0
15-24	88.9	11.1
25-34	77.5	22.5
35-44	62.5	37.5
45-54	70.5	29.5
55-64	71.1	28.9
Over 64	66.7	33.3
Overall	69.0	31.0

Trends in Sexually Transmitted Diseases

Chlamydia

Chlamydia is the most common STD in Montana and the number of cases has been rising since 2000 (Figure 20). National rates in 2006 for chlamydia were 347.8 cases/100,000 population compared with Montana's rate of 280 cases/100,000 population in 2006.

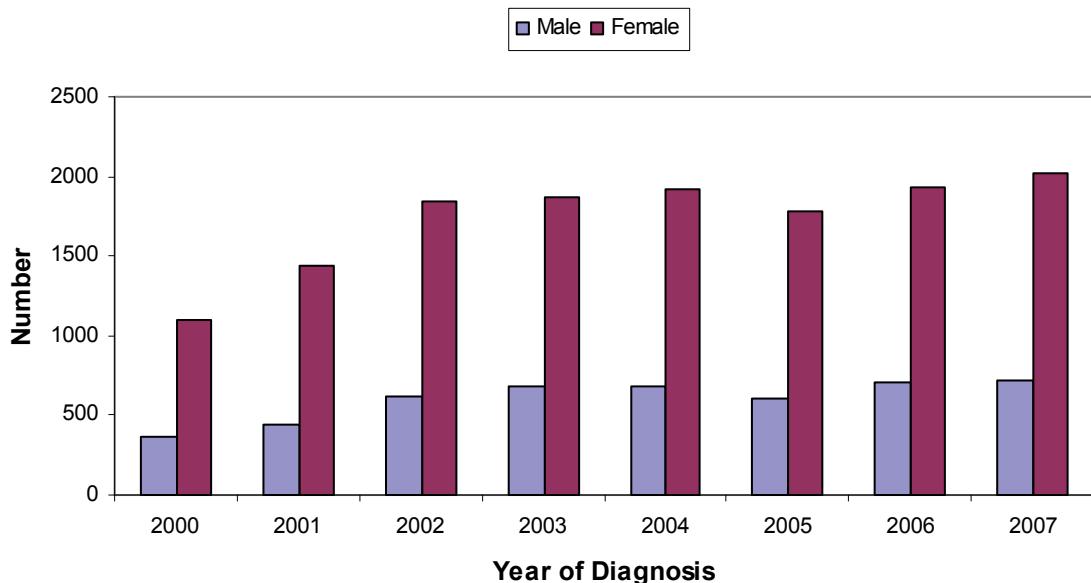
Figure 20. Number and Rate of Reported Chlamydia Infections, 2000-2007



* Preliminary: based on 2006 population

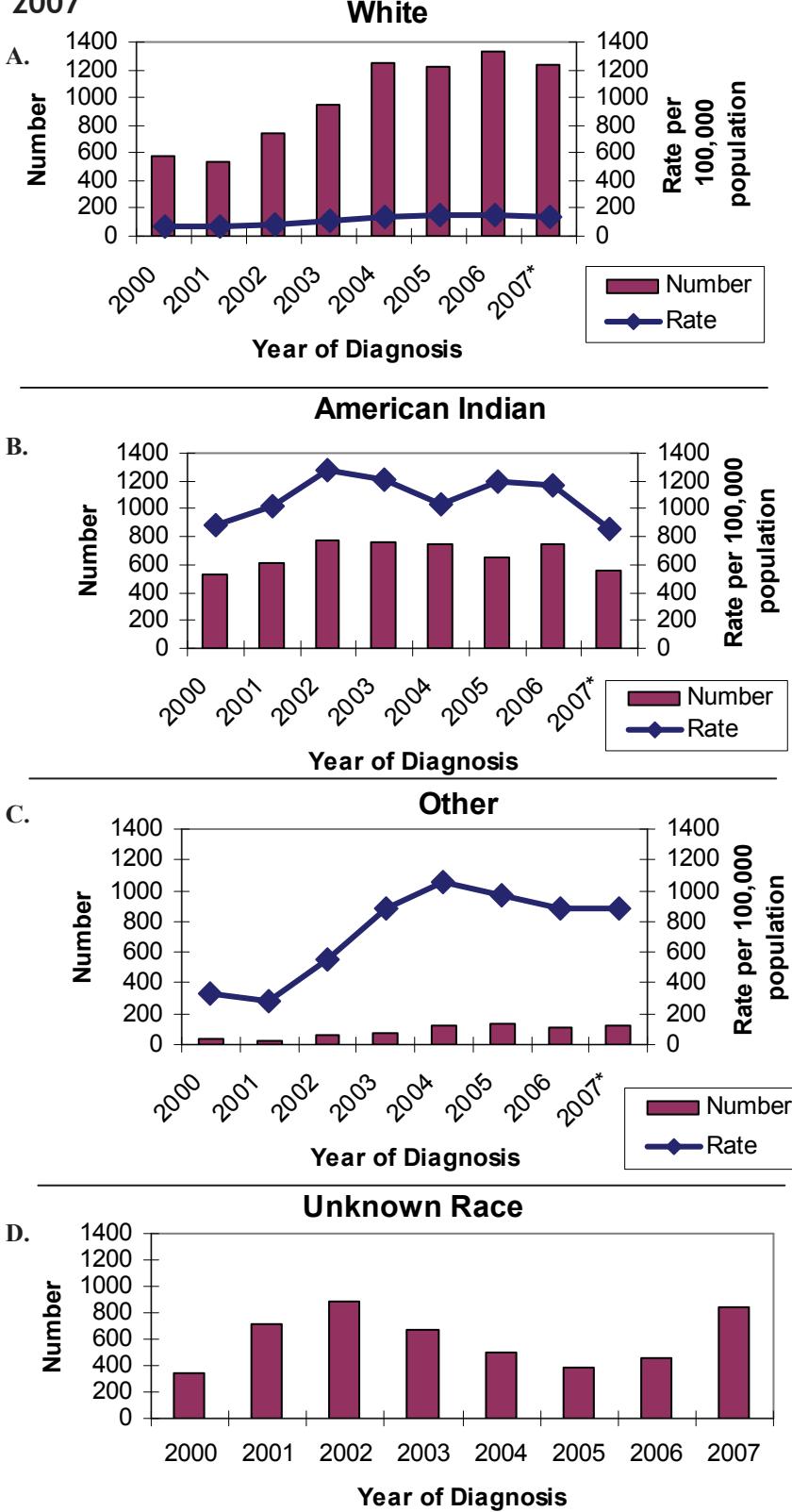
More women are reported as having chlamydia than men (Figure 21). The rate of chlamydia cases among women has been about 2.7 times higher than men for since 2003 (not shown).

Figure 21. Number of Reported Chlamydia Infections, by Sex, 2000-2007



Trends in Sexually Transmitted Diseases

Figure 22. Number and Rate of Reported Chlamydia Infections, by Race, 2000-2007



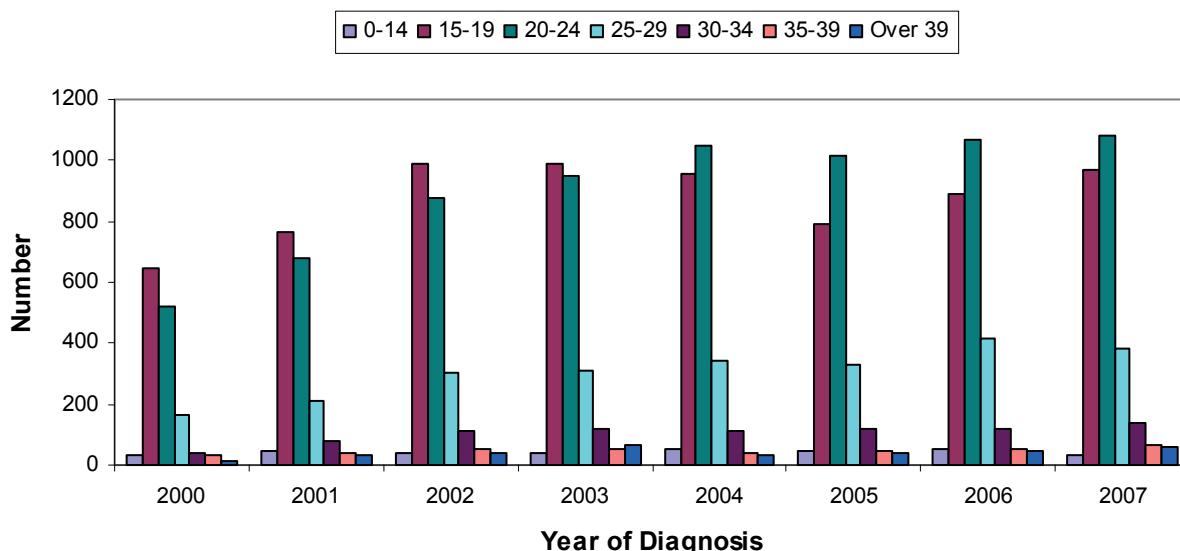
Forty-five percent of reported chlamydia cases in 2007 were among those of White race, up 7% from 2003 (38%). The rate has doubled since 2000 (Figure 22A). Though Whites have higher numbers of chlamydia cases than other races, relative to the population, the rate is lower than other races. American Indians have had an 11% decrease in chlamydia infections from 31% in 2003 to 20% in 2007. However, the rate was about 7.5 times higher than Whites in 2007 (Figure 22B). Though persons of other races represent a small number of chlamydia cases, the rate has more than doubled since 2000 indicating increasing numbers of infections among this population (Figure 22C). Of importance are the high number of cases reported of unknown race. Reclassification of these persons could affect other race outcomes, emphasizing the importance of complete reporting (Figure 22D).

* Preliminary: based on 2006 population

Trends in Sexually Transmitted Diseases

Chlamydia infections seem to occur mostly in persons of ages 15-24 followed by those in the 25-29 age group (Figure 23). 20-24 year olds surpassed the number of 15-19 year olds and has been slowly increasing. The rate among 15-24 year olds has been 3-4 times higher than any other age group since 2003 (not shown) which may be indicative of more screening in this age group.

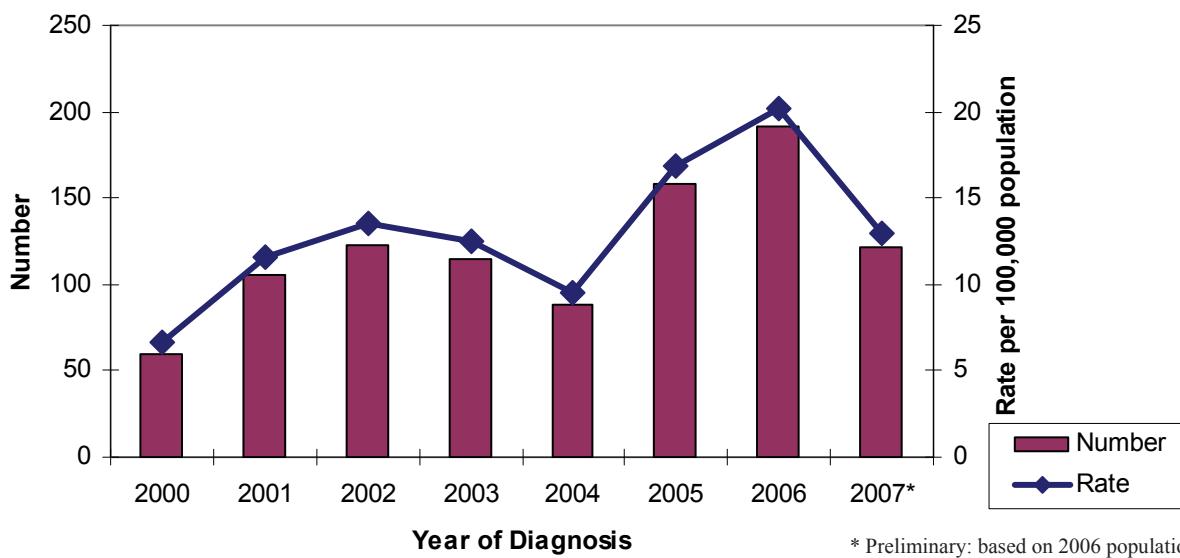
Figure 23. Number of Reported Chlamydia Infections, by Age Group, 2000-2007



Gonorrhea

Reported gonorrhea infections have been increasing since 2000 (Figure 24). A large increase in reported cases occurred in 2005 and 2006, declining in 2007. In 2006, national rates of gonorrhea were 120.9 cases/100,000 population versus the 20.2 cases/100,000 population in Montana (not shown).

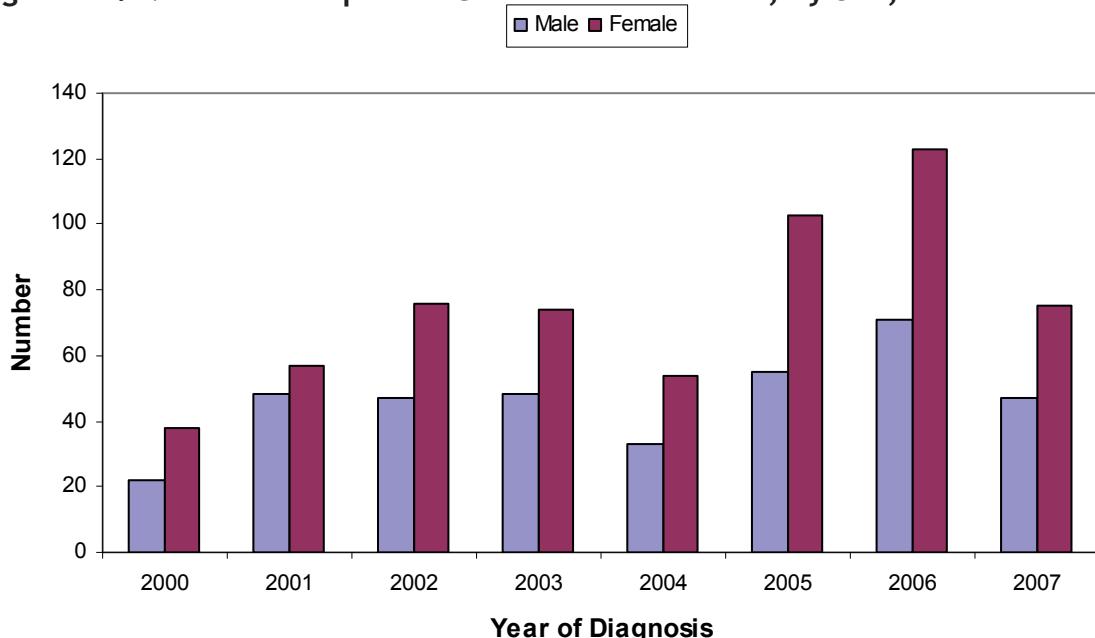
Figure 24. Number and Rate of Reported Gonorrhea Infections, 2000-2007



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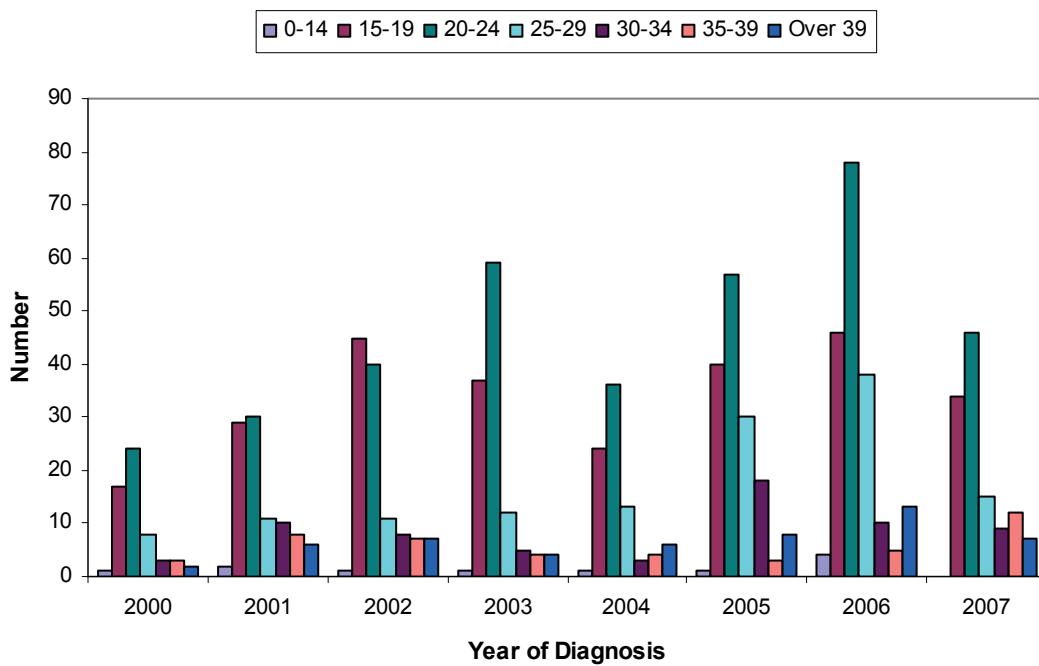
Annually more gonorrhea cases are reported among females than males (Figure 25). The case rate for males in 2006 was 14 cases/100,000 population while the case rate for females was 16 cases/100,000 population (not shown).

Figure 25. Number of Reported Gonorrhea Infections, by Sex, 2000-2007



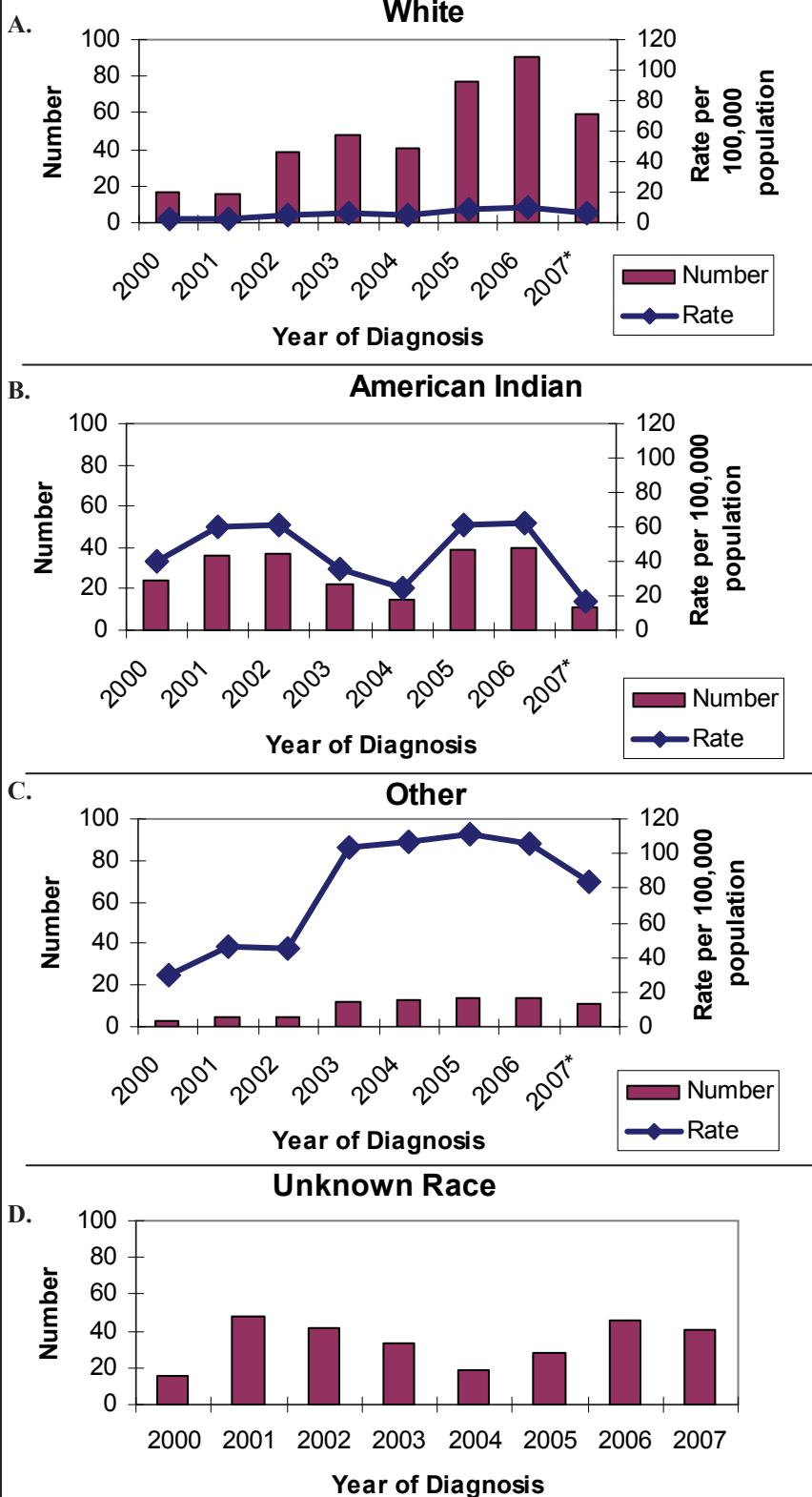
The majority of gonorrhea cases have occurred in 20-24 year olds over the last five years followed by 15-19 year olds (Figure 29). 2005 and 2006 reported increased numbers of gonorrhea cases among 25-29 year olds.

Figure 26. Number of Reported Gonorrhea Infections, by Age Group, 2000-2007



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Figure 27. Number and Rate of Reported Gonorrhea Infections, by Race, 2000-2007



The number of gonorrhea cases has been increasing among Whites. Since 2000 there has been a 20% increase in reported cases. The rate has also tripled in the same time frame indicating higher case numbers among the population (Figure 27A). American Indian/Alaska Natives have experienced a 31% decrease in the number of reported gonorrhea cases from 2000-2007. The rate has also halved since 2000 (Figure 27B). Persons of other races with gonorrhea infections have been reported in increasing numbers since 2000 and have had rates about 10 times higher than persons of White race since 2003 (Figure 27C). Gonorrhea cases reported with unknown or no race have been increasing since 2000, which may lead to underestimation of the disease burden to other races (Figure 27D).

* Preliminary: based on 2006 population

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Syphilis

There have been anywhere from 0 to 8 syphilis cases in the last 5 years (Figure 28). The majority of these cases have been diagnosed in males (Figure 29). There were no early latent syphilis cases for this time period. The national rate for syphilis in 2006 was 3.3 cases/100,000 population. The case count in Montana was too small this year for rate calculation.

Figure 28. Number of Reported Primary and Secondary Syphilis Infections, 2000-2007

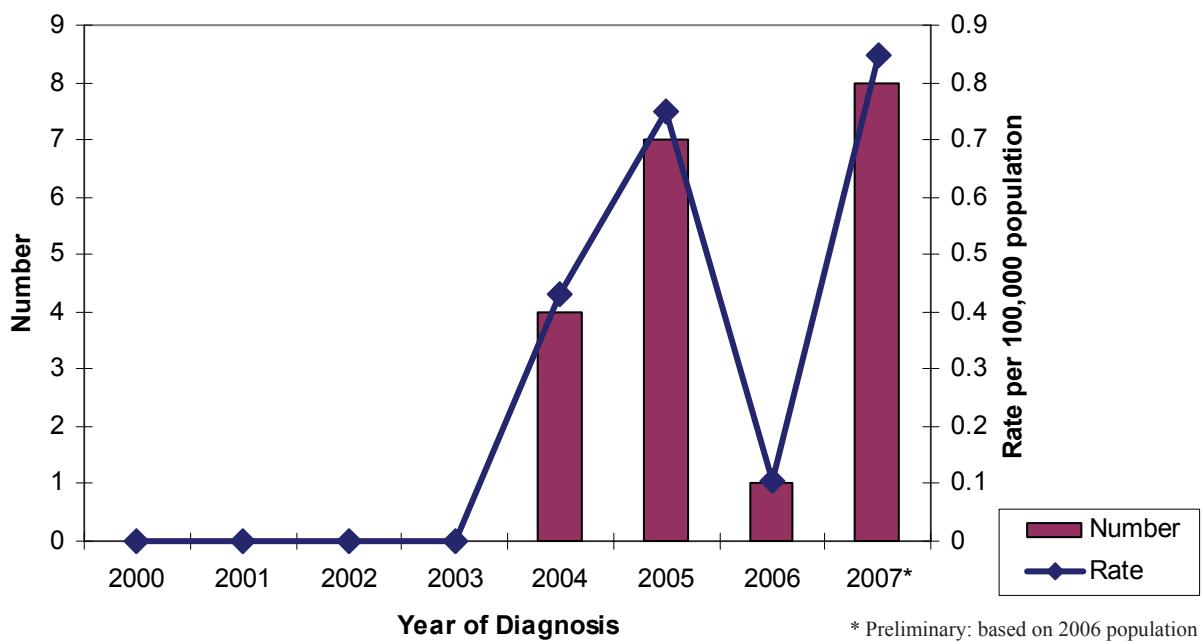
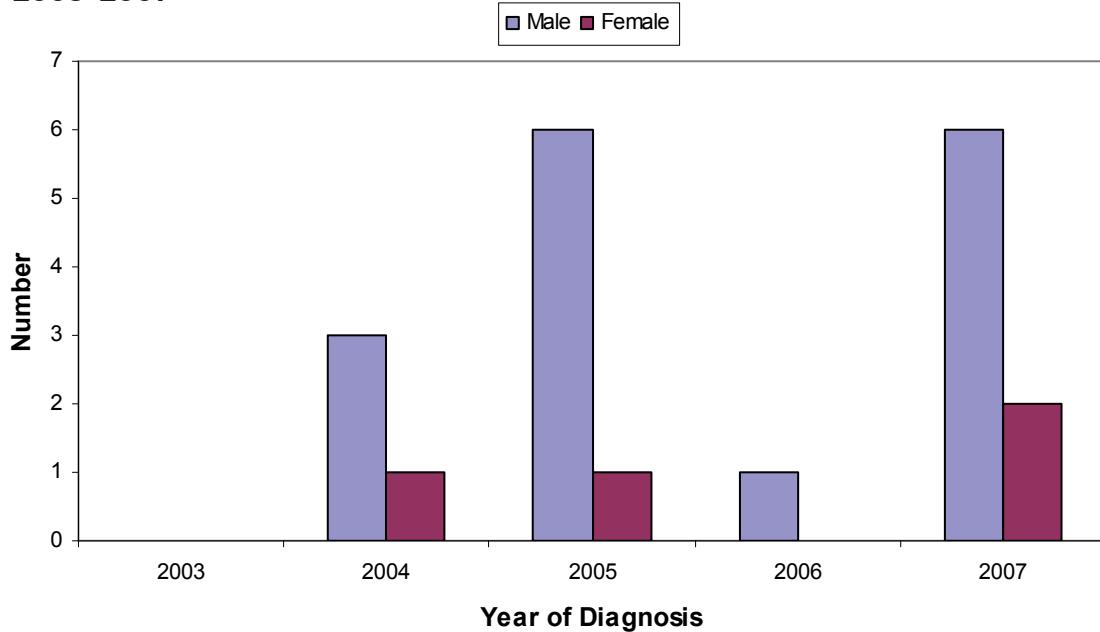
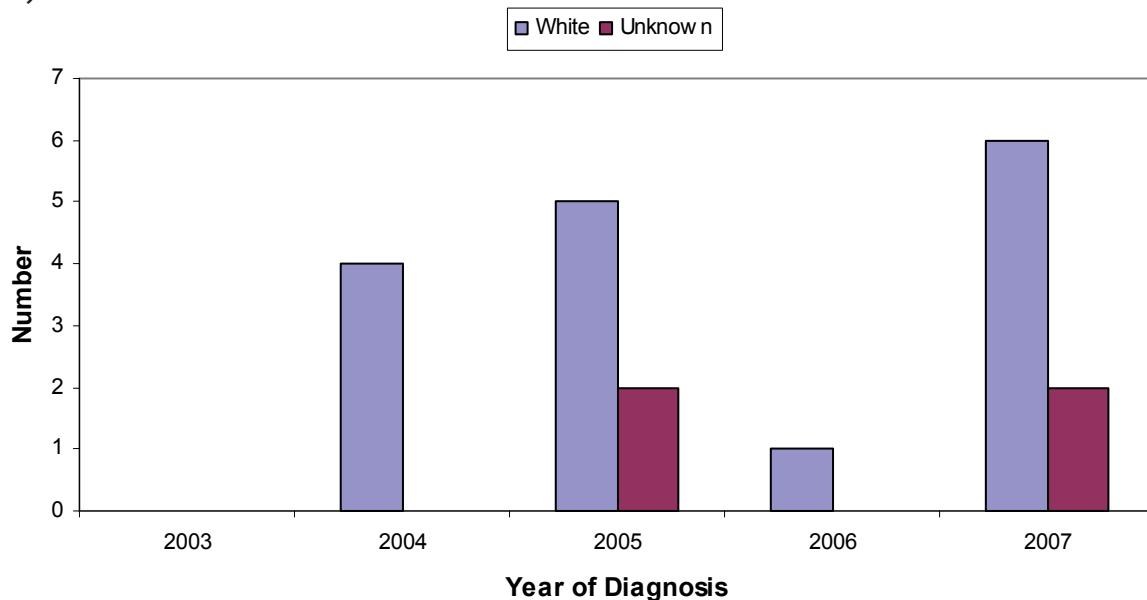


Figure 29. Number of Reported Primary and Secondary Syphilis Infections, by Sex, 2003-2007



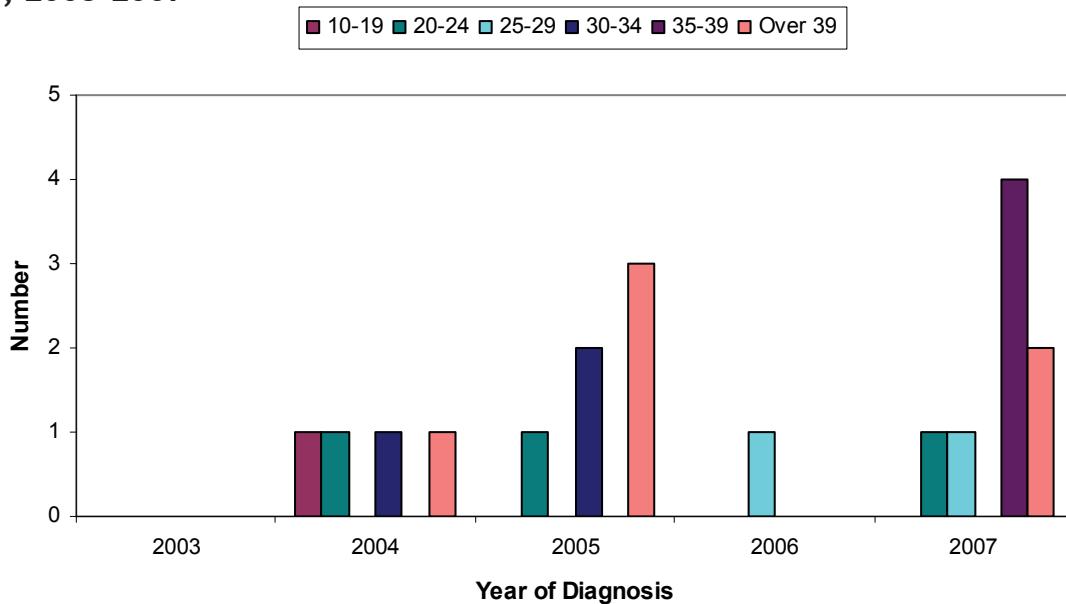
Trends in Sexually Transmitted Diseases

Figure 30. Number of Reported Primary and Secondary Syphilis Infections, by Race, 2003-2007



All syphilis cases occurred among those reporting White race or were reported with race unknown (Figure 30). Syphilis cases appear to not be generalized to one age group, as cases have occurred in multiple age groups. However, there was a sharp rise in 35-39 year olds in 2007 (Figure 31).

Figure 31. Number of Reported Primary and Secondary Syphilis Infections, by Age Group, 2003-2007



HIV/AIDS and Syphilis Co-infection

In the period of 2003-2007, five syphilis cases were also known to be co-infected with HIV. Of these co-infections, all were MSM. All reported a race of White.

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Geography

Chlamydia and gonorrhea occur throughout the state (Figures 32 and 33). Chlamydia case rates were higher near larger cities and near American Indian reservations. Universal access to health care and/or increased screening may be contributing to the higher case rates on reservations. Gonorrhea case counts were only calculated for counties with more than 5 cases. Case counts for syphilis were too small in 2007 to calculate case rates. The 8 cases reported in 2007 were reported from 5 different counties (not shown).

Figure 32. Case Rates of Reported Chlamydia Infections, by County, 2007*

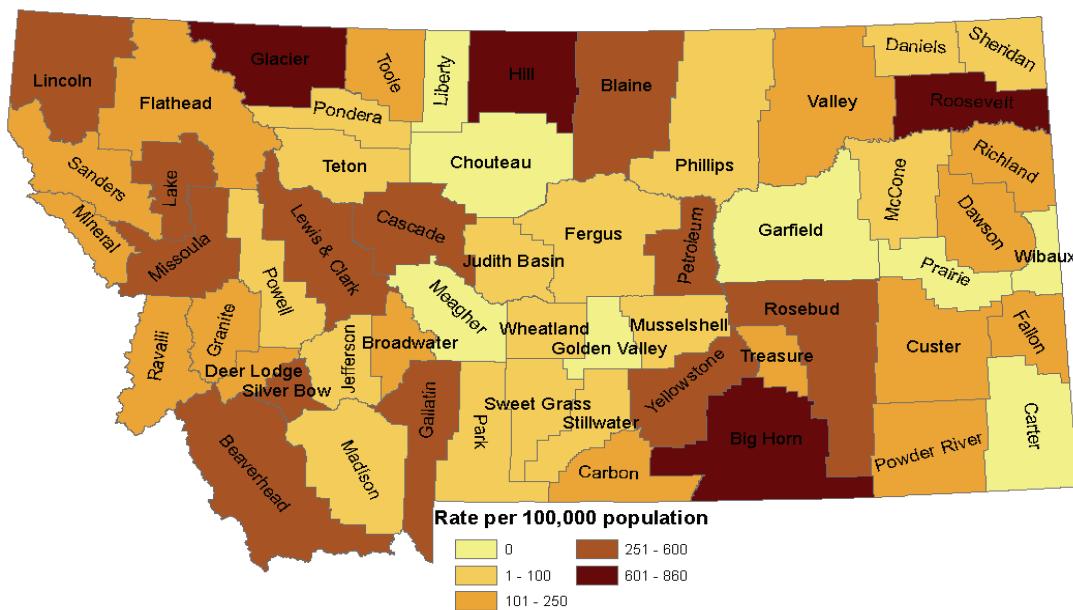
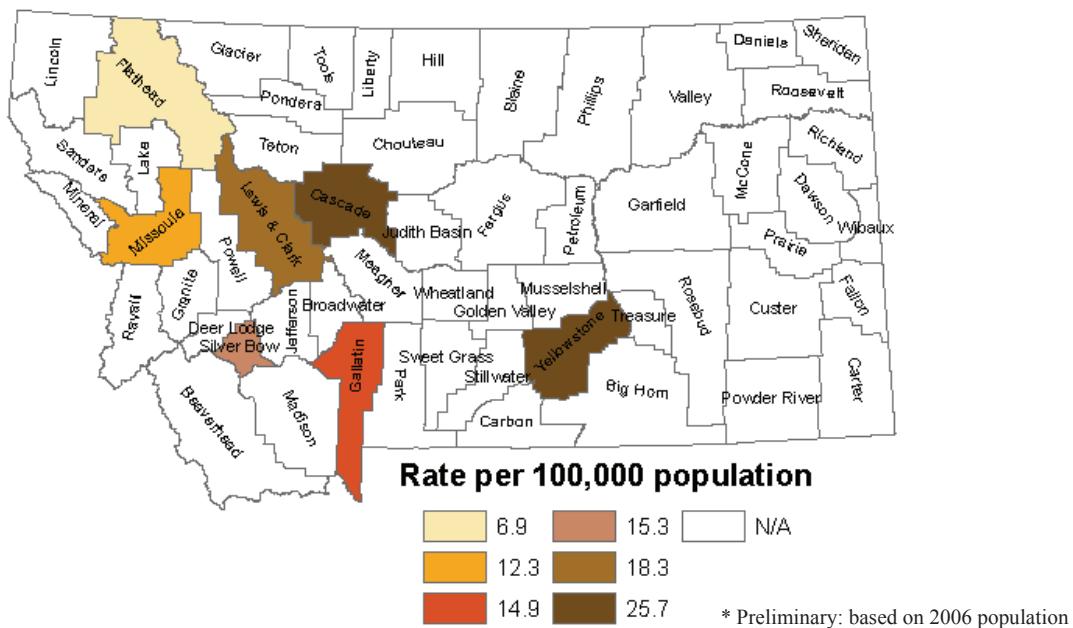


Figure 33. Case Rates of Reported Gonorrhea Infections, by County, 2007*



Glossary

ACS (American Community Survey)- Nationwide survey designed to provide updated estimates for information such as race, age, income, home value, etc between census years

ADAP (AIDS Drug Assistance Program)- Provides HIV/AIDS related prescription drugs to uninsured or underinsured people living with HIV/AIDS

AIDS (Acquired Immune Deficiency Syndrome)- The condition that results after HIV infection defined by a clinical diagnosis of one of the 26 opportunistic infections or CD4 positive lymphocyte count below 200 or 14%

BRFSS (Behavioral Risk Factor Surveillance System)- Phone based survey that collects state-based information on health risk behaviors among adult populations

CARE Act (Comprehensive AIDS Resources Emergency Act)- Federal legislation created to address the health and support needs of persons living with HIV/AIDS and their families in the United States

CDC (Centers for Disease Control and Prevention)- Federal offices concerned with maintaining the health of the nation's population

HAART (Highly Active Antiretroviral Therapy)- Combination prescription drug therapy for persons living with HIV/AIDS

HIV (Human Immunodeficiency Virus)- The virus that causes AIDS, which is spread through blood products, sexual fluids, and from mother to baby. HIV is diagnosed by 1) positive result on a screening test for HIV antibody, i.e. reactive enzyme immunoassay followed by a positive confirmatory test, i.e. Western Blot or immunofluorescence antibody test or 2) a positive result or a detectable quantity on a virologic test i.e. polymerase chain reaction, neutralization assay, or culture

HRH (High Risk Heterosexual)- Adults or adolescents 13 years of age or older who have a history of sexual contact with bi-sexual males, injecting drug users, persons with hemophilia, HIV-infected transfusion recipient, or other HIV-infected persons.

IDU (Injecting Drug User)- Adults or adolescents 13 years of age or older who have injected illicit or nonprescription drugs

MSM (Men Having Sex with Men)- Male adults or adolescents 13 years of age or older who report sexual contact with other men e.g. homosexual contact or men who report sexual contact with both men or women e.g. bi-sexual contact

MSM/IDU (Men Having Sex with Men and who are Injecting Drug Users)- Men who report both sexual contact with other men and injecting illicit or nonprescription drugs

NRS (No Risk Specified)- Persons who have no reported method of exposure to HIV, as defined by CDC

MTDPHHS (Montana Department of Public Health and Human Services)

Other (Other risk)- Includes persons who received clotting factors to treat hemophilia or coagulation disorders, recipients of blood transfusion, and recipients of organ transplants

STD (Sexually Transmitted Disease)- A group of diseases that are transmitted through sexual contact, usually including gonorrhea, herpes, HIV/AIDS, chlamydia, syphilis, and genital warts

Endnotes

1. Montana PHSD-County Health Profiles-Data. 2008.
<http://www.dphhs.mt.gov/PHSD/health-profiles/health-profiles-pronotes.shtml#density>
2. Centers for Disease Control and Prevention. Persons tested for HIV-United States, 2006. MMWR 2008; 57:845-849.
3. Ryan White. 2008. <http://www.ryanwhite.com/pages/story.html>

Data sources:

1. Montana HIV/AIDS Surveillance Database (HARS), funded by the Centers for Disease Control and Prevention (CDC)
2. American Community Survey (ACS)
3. Montana Department of Commerce
4. Montana STD Surveillance Database (STD*MIS), funded by the CDC